

Claims

1. A method for sealing members (3, 4) made of plastic-coated paper or board, the method comprising jointing of the members along a sealing line by melting the plastic coating of at least one member with a laser beam (11), the plastic coating adhering the members to each other when solidified, **characterised** in that the members (3, 4) to be sealed are gripped adjacent the sealing line in order to retain the members in position during the sealing and in that the sealing is performed by means of a sealing means (7) which moves along the sealing line and presses the members apart in order to keep the seal point open, directs a laser beam (11) to the open seal point for melting the plastic and finally presses the members against each other for closing the seal.
2. A method as defined in claim 1, **characterised** in that one of the paper or board members is sealed at a crease (6) formed at its edge, with the members (3, 4) overlapping along the sealing line.
3. A method as defined in claim 2, **characterised** in that the method comprises sealing of the opposite edges (3, 6) of a blank (1) made of plastic-coated paper or board to each other.
4. A method as defined in claim 3, **characterised** in that the method comprises a seal along a side of a bag or container package.
5. A method as defined in any of the preceding claims, **characterised** in that the laser beam (11) is surrounded with a protective gas.
6. A apparatus for implementing the method of any of the preceding claims, **characterised** in that the apparatus comprises clamps (8) for retaining two paper or board members (3, 4) in position, located with respect to each other and to a sealing line, and a laser sealing means (7) movable along the sealing line and comprising a means (9) for opening the seal point, said means pressing the sealable members apart, a laser beam (10) for directing a laser beam (11) melting the plastic coating to the opened seal point, and as the last, a seal closing means (12) for pressing the members against each other.

7. A apparatus as defined in claim 6, **characterised** in that the means for opening the seal point comprises two successive wedge-shaped elements (9) pushing in between the paper or board members (3, 4) along the sealing line and that the laser beam (10) directs the laser beam (11) to the seal point between these elements.

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8. An apparatus as defined in claim 6 or 7, **characterised** in that the clamp has jaws (8), between which the two paper or board members (3, 4) to be sealed are clamped.